

§§ 1.16 to 1.21, the Commissioner is authorized to deduct said fees from Fulbright & Jaworski L.L.P. Account No.: 50-1212/IOWA:026US/SLH. Please amend the application as follows.

## AMENDMENT

### In the Claims:

Please amend the claims as indicated below:

1. (Twice amended) An isolated antimicrobial peptide of 12-37 residues, the peptide comprising an amino acid sequence selected from the group consisting of:

KNLRRIIRKIIHIIKKYG-NH<sub>2</sub> (SEQ ID NO: 1),  
KNIRRIIRKIIHIIKKYG-NH<sub>2</sub> (SEQ ID NO: 6),  
KNIRRIIRKIIHIIKKYG (SEQ ID NO: 7),  
KNLRRIIRKIIHIIKKYG (SEQ ID NO: 8),  
NLRRIIRKIIHIIKKY (SEQ ID NO 9),  
NIRRIIRKIIHIIKKY (SEQ ID NO: 10),  
LRRIIRKIIHIIKK-NH<sub>2</sub> (SEQ ID NO: 11),  
LRRIIRKIIHIIKK (SEQ ID NO: 12),  
IRRIIRKIIHIIKK-NH<sub>2</sub> (SEQ ID NO: 13),  
IRRIIRKIIHIIKK (SEQ ID NO: 14),  
LRRIIRKIIHIIK-NH<sub>2</sub> (SEQ ID NO: 15),  
RRIIRKIIHIIKK-NH<sub>2</sub> (SEQ ID NO: 16),  
RRIIRKIIHIIK-NH<sub>2</sub> (SEQ ID NO: 17),  
GLRKRLRKFRNKIKEKLKKIG (SEQ ID NO: 19),  
KRLRKFRNKIKEKLKKIG (SEQ ID NO: 20),  
RKRLRKFRNKIKEKLKKIGQKI (SEQ ID NO: 21),  
LRKFRNKIKEKLKKIGQKI (SEQ ID NO: 22),  
LRKFRNKIKEKLKKIGQKIQG (SEQ ID NO: 23),

RKFRNKIKEKLKKIG (SEQ ID NO: 24),  
KIKEKLKKIGQKIQG (SEQ ID NO: 25),  
KIKEKLKKIGQKIQGLL (SEQ ID NO: 26), and  
KNLRRIRKIIHIIKKYGPTILRIIRIIG-NH<sub>2</sub> (SEQ ID NO: 28).

3. (Twice amended) A pharmaceutical composition comprising an antimicrobial peptide of 12 to 37 residues, the peptide comprising an amino acid sequence selected from the group consisting of:

KNLRRIRKIIHIIKKYG-NH<sub>2</sub> (SEQ ID NO: 1),  
KNIRRIIRKIIHIIKKYG-NH<sub>2</sub> (SEQ ID NO: 6),  
KNIRRIIRKIIHIIKKYG (SEQ ID NO: 7),  
KNLRRIRKIIHIIKKYG (SEQ ID NO: 8),  
NLRRIIRKIIHIIKKY (SEQ ID NO 9),  
NIRRIIRKIIHIIKKY (SEQ ID NO: 10),  
LRRIRKIIHIIKK-NH<sub>2</sub> (SEQ ID NO: 11),  
LRRIRKIIHIIKK (SEQ ID NO: 12),  
IRRIIRKIIHIIKK-NH<sub>2</sub> (SEQ ID NO: 13),  
IRRIIRKIIHIIKK (SEQ ID NO: 14),  
LRRIRKIIHIK-NH<sub>2</sub> (SEQ ID NO: 15),  
RRIIRKIIHIIKK-NH<sub>2</sub> (SEQ ID NO: 16),  
RRIIRKIIHIK-NH<sub>2</sub> (SEQ ID NO: 17),  
GLRKRLRKFRNKIKEKLKKIG (SEQ ID NO: 19),  
KRLRKFRNKIKEKLKKIG (SEQ ID NO: 20),  
RKRLRKFRNKIKEKLKKIGQKI (SEQ ID NO: 21),  
LRKFRNKIKEKLKKIGQKI (SEQ ID NO: 22),  
LRKFRNKIKEKLKKIGQKIQG (SEQ ID NO: 23),  
RKFRNKIKEKLKKIG (SEQ ID NO: 24),  
KIKEKLKKIGQKIQG (SEQ ID NO: 25),  
KIKEKLKKIGQKIQGLL (SEQ ID NO: 26), and

KNLRRIIRKIIHIIKKYGPTILRIIRIIG-NH<sub>2</sub> (SEQ ID NO: 28),  
formulated in a pharmaceutically acceptable carrier.

Please add the following new claims:

32. (New) An antimicrobial peptide consisting of the sequence RGLRRLGRKIAHGVKKYGPTVLRIRIA-NH<sub>2</sub> (SEQ ID NO: 27).
33. (New) A pharmaceutical composition comprising (a) an antimicrobial peptide consisting of the sequence RGLRRLGRKIAHGVKKYGPTVLRIRIA-NH<sub>2</sub> (SEQ ID NO: 27), and (b) a pharmaceutically acceptable carrier.
34. (New) An antimicrobial peptide consisting of the sequence KNLRRRIIRKIIHIIKKYG-NH<sub>2</sub> (SEQ ID NO: 1).
35. (New) The antimicrobial peptide of claim 1, consisting of the sequence KNIRRIIRKIIHIIKKYG-NH<sub>2</sub> (SEQ ID NO: 6).
36. (New) The antimicrobial peptide of claim 1, consisting of the sequence KNIRRIIRKIIHIIKKYG (SEQ ID NO: 7).
37. (New) The antimicrobial peptide of claim 1, consisting of the sequence KNLRRRIIRKIIHIIKKYG (SEQ ID NO: 8).
38. (New) The antimicrobial peptide of claim 1, consisting of the sequence NLRRIIRKIIHIIKKY (SEQ ID NO 9).
39. (New) The antimicrobial peptide of claim 1, consisting of the sequence NIRRIIRKIIHIIKKY (SEQ ID NO: 10).

40. (New) The antimicrobial peptide of claim 1, consisting of the sequence LRRIRKIIHIKK-NH<sub>2</sub> (SEQ ID NO: 11).
41. (New) The antimicrobial peptide of claim 1, consisting of the sequence LRRIRKIIHIKK (SEQ ID NO: 12).
42. (New) The antimicrobial peptide of claim 1, consisting of the sequence IRRIRKIIHIKK-NH<sub>2</sub> (SEQ ID NO: 13).
43. (New) The antimicrobial peptide of claim 1, consisting of the sequence IRRIRKIIHIKK (SEQ ID NO: 14).
44. (New) The antimicrobial peptide of claim 1, consisting of the sequence LRRIRKIIHIK-NH<sub>2</sub> (SEQ ID NO: 15).
45. (New) The antimicrobial peptide of claim 1, consisting of the sequence RRIIRKIIHIKK-NH<sub>2</sub> (SEQ ID NO: 16).
46. (New) The antimicrobial peptide of claim 1, consisting of the sequence RRIIRKIIHIK-NH<sub>2</sub> (SEQ ID NO: 17).
47. (New) The antimicrobial peptide of claim 1, consisting of the sequence GLRKRLRKFRNKIKEKLKKIG (SEQ ID NO: 19).
48. (New) The antimicrobial peptide of claim 1, consisting of the sequence KRLRKFRNKIKEKLKKIG (SEQ ID NO: 20).
49. (New) The antimicrobial peptide of claim 1, consisting of the sequence RKRLRKFRNKIKEKLKKIGQKI (SEQ ID NO: 21).

50. (New) The antimicrobial peptide of claim 1, consisting of the sequence LRKFRNKIKEKLLKKIGQKI (SEQ ID NO: 22).
51. (New) The antimicrobial peptide of claim 1, consisting of the sequence LRKFRNKIKEKLLKKIGQKIQG (SEQ ID NO: 23).
52. (New) The antimicrobial peptide of claim 1, consisting of the sequence RKFRNKIKEKLLKKIG (SEQ ID NO: 24).
53. (New) The antimicrobial peptide of claim 1, consisting of the sequence KIKEKLLKKIGQKIQG (SEQ ID NO: 25).
54. (New) The antimicrobial peptide of claim 1, consisting of the sequence KIKEKLLKKIGQKIQGLL (SEQ ID NO: 26).
55. (New) The antimicrobial peptide of claim 1, consisting of the sequence KNLRRIIRKIIHIIKKYGPTILRIIRIIG-NH<sub>2</sub> (SEQ ID NO: 28).

## **REMARKS**

### **I. Status of the Claims**

Claims 1 and 3 have been examined and stand rejected under 35 U.S.C. §112, first paragraph (“new matter”) and 35 U.S.C. §102. The detailed basis for the rejections, and applicants’ response thereto, are set out in detail below.

### **II. Rejection Under 35 U.S.C. §112, First Paragraph**